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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,151

01/11/2006

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EXAMINER

SIMMONS WILLIS, TRACEY A

ART UNIT

PAPER NUMBER

1619

MAIL DATE

DELIVERY MODE

01/14/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/564,151	Applicant(s) OBAE ET AL.	
	Examiner TRACEY SIMMONS WILLIS	Art Unit 1619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 9-26 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 and 16-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-15 and 20-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01112006; 07092007</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Status of the Claims

Applicant's election without traverse of Group III including claims 11-15 and 20-26 in the reply filed on October 28, 2008 is acknowledged.

Claims 1-26 are pending in the current application, of which claims 11-15 and 20-26 are being considered on their merits. Claims 1-10 and 16-19 are withdrawn from consideration at this time.

This is the first Office Action on the merits of the claims.

It is noted that the preliminary amendment submitted 1/11/06 with the original filing includes text other than the claims on the claim listing page, which is improper (see 37 C.F.R. 1.121(c) (1): "[T]he sheet(s) that contain the text of any part of the claims shall not contain any other part of the amendment). Since the status of the claims is not in dispute, and in the interest of compact prosecution, the examiner has elected to examine the claims. Failure in the future to comply fully with 37 C.F.R. 1.121 in making amendments will necessitate the mailing of a notice of noncompliant amendment.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11-15 and 21-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 11 as written incorporates withdrawn claim 1. Examiner suggests incorporation of the limitations of claim 1 into claim 11. In the interest of compact prosecution, claim 11 is interpreted as incorporating all of the limitations of claim 1. Claims 12-14 suffer similar deficiencies with respect to withdrawn claim 1, and claims 20-23 suffer similar deficiencies with respect to withdrawn claim 16.

Because claims 15 and 24-26 depend variously from indefinite claims 11 and 21-23 and do not clarify the point of confusion, they must also be rejected under 35 U.S.C. 112, second paragraph.

The term “reduced pressure” in claims 13, 14, 22, and 23 is a relative term which renders the claim indefinite. The term “reduced pressure” is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Examiner is not certain what values or units are pertained to establish “reduced pressure” as no point of reference was given (i.e. below atmospheric pressure or from a higher pressure value to a lower pressure value).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11, 13, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,755,397 (Eden et al).

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Eden teach of encapsulation of materials in starch, the encapsulation process involving slurring the starch and material in water, injecting steam into the slurry to raise its temperature to the range of 120 to 180 °C. The pressure of the slurry is then reduced to atmospheric and the temperature reduced to below 112 °C [col 1, lines 40-49]. The starch particles can then be dried [col 3, line 11]. Types of starch used include potato starch [col 2, line 16]. While Eden does not explicitly teach of the swelling of the starch, the art teaches all of the steps cited and the effect of swelling is an inherent result of steps as taught. Examiner notes that the steps as cited are taught in the prior art and would thereby produce the functional starch powder with the properties as cited in claim 1. See M.P.E.P. § 2112.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-15 and 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,755,397 (Eden et al) in view of U.S. Patent 6,906,016 (Tsaur). Eden teach of encapsulation of materials in starch, the encapsulation process involving slurring the starch and material in water, injecting steam into the slurry to raise its temperature to 120 to 180 °C. The pressure of the slurry is then reduced to atmospheric and the temperature reduced to below 112 °C [col 1, lines 40-49]. The starch particles can then be dried [col 3, line 11]. Types of starch used can include potato starch [col 2, line 16].

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Eden does not specifically teach of the degree of swelling of the starch or of the particle size.

Tsaur teach of personal care products comprising emulsions stabilized by starches and fatty acids. The starches are used as a structuring system [col 4, lines 22-25]. Tsaur also teach that the starch functions as a structuring agent when it is highly swollen by water which can be obtained by heat [col 10, lines 60-61], and that the starch swells to at least 800% by volume to form particles with a size of 2 to 300 μm . [col 11, lines 50-52]. Acceptable starches include potato [col 10, line 54].

One of ordinary skill in the art at the time of the invention would have been motivated to optimize the temperature for injecting steam dependent on the level of dispersion of the starch for encapsulation or swelling of the starch desired to function as a structurant. One of ordinary skill in the art at the time of the invention was made would have been motivated to optimize the swell volume of the starch to achieve the desired structurant properties as well as optimize the size needed for adequate encapsulation.

Therefore the invention as a whole would have been *prima facie* obvious at the time it was made.

Conclusion

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TRACEY SIMMONS WILLIS whose telephone number is (571)270-5861. The examiner can normally be reached on Mondays to Fridays from 8:30 am to 5:30 pm. The examiner can also be reached on alternate Fridays from 8:30 am to 12:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached at (571)272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/T. S.W./

Examiner, Art Unit 1619

/Lora E Barnhart/

Primary Examiner, Art Unit 1651